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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,649	03/19/2004	James Barton Johnson	PII-27802/04	7755

25006 7590 04/17/2006

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EXAMINER

EWALD, MARIA VERONICA

ART UNIT	PAPER NUMBER
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1722

DATE MAILED: 04/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/804,649	Applicant(s) JOHNSON, JAMES BARTON	
	Examiner Maria Veronica D. Ewald	Art Unit 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Heatherly (U.S. 5,290,166). Heatherly teaches a tube bending fixture comprising a frame (figure 1A); a lower tube support pivotally mounted to said frame between a first and second position about a first axis (item 11 – figure 1A), an upper tube support pivotally mounted to said frame between a first and a second position about a second axis (item 13 – figure 1A), a bar slidably mounted to said upper tube support and movable between an extended and a retracted position (item 30' – figure 1A), at least one lower mandrel mounted to said lower tube support and dimensioned to fit within one end of a tube to be bent (item 47 – figure 1B), at least one upper mandrel mounted to said bar (item 47' – figure 1B), said upper and lower mandrels being aligned with each other when said upper and lower tube supports are in said first pivotal position, said upper mandrel dimensioned to fit within a second end of the tube to be bent when said bar is in said extended position (figure 3A), said upper mandrel being spaced from the second end of the tube to be bent when said bar is in said retracted position (figure 1C and 2), a lock mechanism which selectively retains said upper and lower tube supports

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in said second pivotal position (items 24A, 24A', 24B and 24B' – figure 3A; column 3, lines 25 – 30). In addition, the reference teaches that the apparatus is further comprised of a first gear secured to said lower tube support coaxial with said first axis and a second gear secured to said upper tube support coaxial with said second axis, wherein said first and second gear are in mesh with each other (figures 1A and 1C; column 3, lines 5 – 23); wherein said lock mechanism comprises a lock pin mounted to said frame which selectively engages an opening in one of said tube supports when said tube supports are in said second pivotal position (figure 3A; column 3, lines 25 – 40); wherein said frame is U-shaped having two spaced apart and parallel side frame members and a bottom frame member (figure 1B); wherein said lower tube support is U-shaped having two spaced apart and parallel side members (items 35A and 35B – figure 1B) and a bottom member (item 41A – figure 1B).

With respect to claims 6 – 13, Heatherly further teaches that the apparatus is further comprised of a crossbar extending between said side members of said lower tube support and means for adjustably securing said crossbar to said side members of said lower tube support, wherein said at least one lower mandrel is mounted to said crossbar (item 33 – figure 1B); wherein said adjustable securing means comprises a slot formed in each side member of said lower tube support and a pair of fasteners, one fastener extending through each slot and engaging said crossbar (item 44A and 44B – figure 1B; column 4, lines 1 – 5). In addition, Heatherly teaches that the apparatus is comprised of at least one former attached to said frame (items 29 and 29' – figure 3B), said former having a channel which engages an intermediate port of a tube mounted to

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said upper and lower mandrels (items 50 and 50' – figure 3B), said channel conforming in desired shape to the tube when said upper and lower tube supports are in said second pivotal position (figure 3B; column 5, lines 1 – 2, 5 – 25); wherein said lower mandrel includes a bendable portion which registers with said former (item 47 – figure 3B); wherein said bendable portion of said lower mandrel comprises a spring (column 6, lines 58 – 60); wherein said bendable portion of said lower mandrel comprises a corrugated metal section (column 3, lines 50 – 51) and wherein the apparatus is further comprised of a spring-loaded mount which secures said lower mandrel to said lower tube support and a spring-loaded mount which secures said upper mandrel to said bar (column 6, lines 58 – 62).

Reference(s) of Interest

14. Matsuda, et al. (U.S. 5,424,015) is cited of interest to show the state of the art.

Conclusion


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Maria Veronica D. Ewald whose telephone number is 571-272-8519. The examiner can normally be reached on M-F, 8 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MVE


JOSEPH S. DEL SOLE
PRIMARY EXAMINER
4/14/06